Application No.: 10/064,176 Amendment dated: July 10, 2006 Reply to Office Action of January 10, 2006 Attorney Docket No.: 22993.2

This listing of claims will replace all prior versions and listings of claims in this application:

a.) Listing of Claims

1. (Currently amended) A URL resolution system for resolving Universal Resource Locators (URLs), the URL resolution system comprising:

a website crawler for crawling a website <u>comprising one or more webpages</u>, and for locating script code and selecting script code that possesses one or more specific <u>portions</u> which is <u>are</u> used to dynamically create at-least one <u>or more</u> script URLs; and

a script URL resolution component for causing examination of <u>said one or more</u> <u>specific portions of</u> the script code-<u>located selected</u> during the crawling <u>which are used to dynamically create one or more script URLs</u> and causing execution of <u>said one or more selected portions of</u> the script code to obtain <u>said one or more</u> script URLs.

2. (Currently amended) The URL resolution system as claimed in claim 1 wherein the website includes one or more web pages, and

the website crawler crawls individual web pages associated with <u>a</u> websites, and has a crawling controller for controlling the website crawler.

- (Currently amended) The URL resolution system as claimed in claim 2 wherein the
 website crawler has a script code detector for determining if a web page uses script code
 to dynamically create at-least-one or more script URLs.
- 4. (Currently amended) The URL resolution system as claimed in claim 3 wherein the script code detector has a notification generating function for generating a notification when the script code detector locates a web page that uses script code to dynamically create at least one or more script URLs.
- 5. (Original) The URL resolution system as claimed in claim 2 wherein the crawling controller receives results of script code examination from the script URL resolution component, and controls the website crawler based on the examination results.

Reply to Office Action of January 10, 2006

Attorney Docket No.: 22993.2

6. (Original) The URL resolution system as claimed in claim 5 wherein the examination

results include the script URL when the script code examination is successful, and the

crawling controller controls the web crawler to crawl a web page identified by the script

URL.

7. (Original) The URL resolution system as claimed in claim 6 wherein the crawling

controller controls the website crawler to crawl multiple web pages in parallel.

8. (Original) The URL resolution system as claimed in claim 6 wherein the crawling

controller controls the website crawler to crawl the web page identified by the script URL

immediately.

9. (Original) The URL resolution system as claimed in claim 6 wherein the crawling

controller controls the website crawler to queue the web page identified by the script

URL for crawling at a later time.

10. (Cancelled)

11. (Currently amended) The URL resolution system as claimed in claim 10 1 wherein

the website includes one or more web pages, the script code has a specific part that is

used to create the script URL, and the script URL resolution component comprises:

web page located by the website crawler; and

a web page loading controller for instructing a web page examiner to load the

a script code execution controller for instructing the web page examiner to execute the said specific part portions of the script code used in the loaded web page to

obtain the said one or more script URLs.

12. (Previously presented) The URL resolution system as claimed in claim 11 wherein

the URL resolution system includes the web page examiner.

Reply to Office Action of January 10, 2006

Attorney Docket No.: 22993.2

13. (Previously presented) The URL resolution system as claimed in claim 11 wherein the script code execution controller uses an execution function of the web page examiner

to execute the specific part of the script code.

14. (Currently amended) The URL resolution system as claimed in claim 11.4 wherein the website crawler has a script code detector for determining if a web page uses

script code to dynamically create at least one script URL, the script code detector

generates a notification when it locates a web page that uses one or more specific

portions of script code to dynamically create at least one or more script URLs; and

the web page loading controller controls loading of the located web page in

response to the notification received from the website crawler.

15. (Currently amended) The URL resolution system as claimed in claim 44.1 wherein the script URL resolution component outputs an execution result including the script URL when the execution of the script code is successful; and the website crawler performs crawling of a web page identified by the script URL.

the script URL resolution component outputs an examination result including a

failure result when the examination of the script code fails.

16. (Original) The URL resolution system as claimed in claim 1 wherein

17. (Currently amended) The URL resolution system as claimed in claim 1 wherein the

URL resolution system further comprises a presentation unit to present the examination

result to a user.

18. (Original) The URL resolution system as claimed in claim 1 wherein the script URL

resolution component is provided as a part of the URL resolution system.

Reply to Office Action of January 10, 2006

Attorney Docket No.: 22993.2

19. (Currently amended) The URL resolution system as claimed in claim 18 1 wherein the script URL resolution component is provided as a part of the website crawler.

20. (Currently amended) The URL resolution system as claimed in claim 13 11 wherein

the website crawler includes the web page examiner.

21. (Currently amended) The URL resolution system as claimed in claim 1 wherein the

website has one or more web pages, and the script URL resolution component is a script

URL gatherer for locating each URL contained in any of the web pages of associated

with the website and causing examination of a web page identified by each URL during

the crawling to resolve script code contained in the web page to obtain any one or more

script URLs created by the script code.

22. (Currently amended) The URL resolution system as claimed in claim 21 further

comprising an advanced web page examiner having:

a web page loader for loading a web page identified by a URL received from the

script URL gatherer; and

a script code examiner for examining the loaded web page to resolve any script URL

that is created by script code in the loaded web page.

23. (Currently amended) The URL resolution system as claimed in claim 22 wherein the

script code examiner selects and executes specific portions of the script code found in the

loaded web page used to dynamically create one or more script URLs, and returns the

execution result said one or more script URLs to the script URL gatherer.

24. (Previously presented) The URL resolution system as claimed in claim 22 wherein

the advanced web page examiner is provided as a part of the URL resolution system.

25. (Currently amended) The URL resolution system as claimed in claim 22 21 wherein

Reply to Office Action of January 10, 2006

Attorney Docket No.: 22993.2

the website crawler further comprises a script code detector for detecting a web page that uses script code to create at least one script URL; and

the script URL gatherer sends to the advanced web page examiner a URL of the web page detected by the script code detector.

 (Currently amended) A method for resolving Universal Resource Locators (URLs). the method comprising steps of:

locating script code which dynamically creates at least one or more script URLs while crawling a website; and

examining the specific portions of the script code used to dynamically create one or more script URLs to obtain the said one or more script URLs from the examination result by executing-the said specific portions of script code; and crawling one or more web pages identified by said one or more script URLs.

27. (Currently amended) The method as claimed in claim 26 wherein the locating step locates selects the one or more specific portions of said script code which creates at least one or more script URLs by examining said specific portions of script code found in the website

28. (Cancelled)

29. (Currently amended) The method as claimed in claim 26 wherein a website has one or more web pages:

the locating step locates step of locating script code comprises locating a web page that uses script code to dynamically create at least one or more script URLs, the script code having a specific part portion that is used for the creation of the said one or more script URLs; and

the examination step step of examining specific portions of the script code comprises the steps of:

loading the located web page; and

Reply to Office Action of January 10, 2006

Attorney Docket No.: 22993.2

executing the specific part portion of the script code in the loaded web page to resolve the said one or more script URLs.

30. (Currently amended) The method as claimed in claim 29 wherein the loading step of <u>loading the webpage</u> comprises a step of instructing a web page examiner to load the

located web page.

31. (Currently amended) The method as claimed in claim 29 wherein the execution step

of executing the specific portion of the script code comprises a step of instructing a web

page examiner to execute the specific part of the script code.

32. (Currently amended) The method as claimed in claim 29 further comprising a the

additional step of continuing crawling of a web page identified by the script URL.

33. (Currently amended) The method as claimed in claim 32 wherein the continuing step

of continuing crawling of a web page comprises a step of crawling the web page

identified by the script URL immediately.

34. (Currently amended) The method as claimed in claim 32 wherein the eontinuing step

of continuing crawling of a web page comprises a step of crawling the web page

identified by the script URL in parallel to crawling of other web page.

35. (Currently amended) The method as claimed in claim 32 wherein the continuing step

of continuing crawling of a web page comprises steps of

queuing the web page identified by the script URL; and

crawling the queued web page at a later time.

36. (Currently amended) The method as claimed in claim 26 wherein a website has one

or more web pages and the locating step of locating script code comprises steps of:

finding a URL in the web pages; and

Reply to Office Action of January 10, 2006

portions of script code.

Attorney Docket No.: 22993.2

examining a web page identified by the URL to locate script code in the web page identified by the URL

37. (Currently amended) The method as claimed in claim 36 further comprising a the additional step of selecting a web page that contains script code that is used to dynamically create at least one or more script URLs, and wherein the examining step examines the selected web page.

38. (Currently amended) The method as claimed in claim 26 further comprising the additional steps of:

obtaining examination results including the said one or more script URLs when the examination step is successful and a failure result when the examination step fails to obtain the said one or more script URLs; and presenting to a user the examination result including the said one or more script URLs and/or the failure result.

39. (Currently amended) A computer readable medium storing the instructions and/or statements for use in the execution in a computer of a method for resolving Universal Resource Locators (URLs), the method comprising steps of:

locating script code which creates at least one script URL while crawling a website comprising one or more web pages:

determining whether said script code possesses one or more specific portions which are used to dynamically create one or more script URLs; and examining the said one or more specific portions of script code to obtain the said one or more script URLs from the examination result by executing the said one or more

40. (Currently amended) Electronic signals for use in the execution in a computer of a method for resolving Universal Resource Locators (URLs), the method comprising steps of:

Application No.: 10/064,176 Amendment dated: July 10, 2006 Reply to Office Action of January 10, 2006

Attorney Docket No.: 22993.2

locating script code which creates at least one script URL while crawling a website comprising one or more web pages;

determining whether said script code possesses one or more specific portions which are used to dynamically create one or more script URLs; and examining the said one or more specific portions of script code to obtain the said one

or more script URLs from the examination result by executing the said one or more portions of script code.

41. (Currently amended) A computer program product for use in the execution in a computer of a method for resolving Universal Resource Locators (URLs), the computer program product comprising:

a module for locating script code which ereates at least one script URL possesses one or more specific portions which are used to dynamically create one or more script URLs while crawling a website comprising one or more web pages; and a module for examining the said specific portions of script code to obtain the said one or more script URLs from the examination result by executing the said one or more specific portions of script code.

42. (New) A URL resolution system for resolving Universal Resource Locators (URLs), said URL resolution system comprising:

a website crawler for crawling a website comprising one or more web pages and locating script code within said website;

a script code detector for specifically determining the presence of portions of said script code used to dynamically create one or more script URLs; and

a script URL resolution component for examining said portions of said script code used to dynamically create said one or more script URLs to obtain said one or more script URLs by identifying one or more script URLs from said portions of said script code.

Application No.: 10/064,176 Amendment dated: July 10, 2006 Reply to Office Action of January 10, 2006

Attorney Docket No.: 22993.2

43. (New) The URL resolution system as claimed in claim 32 wherein script URL

resolution component identifies said one or more script URLs by executing said

portions of said script code used to dynamically create one or more script URLs.

44. (New claim) A method of testing the functionality of a website containing script

URLs, said method comprising the following steps:

providing a URL resolution system comprising:

a website crawler for crawling a website comprising one or more web pages and

locating script code within said website;

a script code detector for specifically determining the presence of portions of said

script code used to dynamically create one or more script URLs; and

a script URL resolution component for examining said specific portions of said

script code used to dynamically create said one or more script URLs to obtain said

one or more script URLs by identifying one or more script URLs in the specific

portion of said script code;

wherein said URL resolution component obtains said one or more script URLs

and returns said one or more script URLs to said webcrawler;

wherein said web crawler crawls said website to test the integrity of each URL

contained within said website including script URLs; and

wherein said URL resolution system comprises a presentation unit to report non-

resolving or 'broken' URLs to a user.